

Yashoda Shikshan Prasark Mandal

Yashoda Technical Campus, Satara

An Autonomous Institute



Sustainable Development Goals Implementation Policy



1. Preamble

Yashoda Technical Campus, Satara considers sustainable development as an integral dimension of quality education, institutional development and social responsibility. The Institute recognizes that higher education institutions have an important role in preparing students to address environmental, technological, economic and social challenges through knowledge, innovation, responsible practices and community engagement.

The Institute promotes the principles of the **United Nations Sustainable Development Goals (SDGs)** through its academic processes, student learning experiences, projects, research and innovation, entrepreneurship, campus practices and community engagement.

Rather than treating SDG activities as isolated programmes, the Institute promotes their integration into established academic and institutional processes. Sustainability related themes and real world problems are incorporated wherever appropriate through course planning, experiential learning, participative learning, active learning, collaborative learning, student projects, internships, seminars, mini projects, innovation activities and outreach programmes.

This approach is consistent with the Institute's **Outcome Based Education (OBE)** framework, wherein academic activities are systematically planned, implemented, assessed and reviewed. The existing academic process includes preparation of course plans covering lesson planning, Course Outcome delivery, assessment and laboratory activities, followed by implementation and academic monitoring.

The Institute therefore adopts this policy to provide a structured framework for integrating SDGs into teaching, learning, research, innovation, institutional operations and community engagement.

2. Vision

To develop Yashoda Technical Campus as a responsible, inclusive and sustainable higher education institution that contributes meaningfully to the achievement of the United Nations Sustainable Development Goals through education, research, innovation, responsible campus practices and community engagement.

3. Mission

The Institute shall strive to:

1. Integrate sustainability principles into education and learning.
2. Develop students' capacity to understand and address real world sustainability challenges.
3. Promote research, innovation and technological solutions for sustainable development.
4. Encourage responsible utilisation of institutional resources.
5. Promote environmentally sustainable campus practices.



6. Strengthen community engagement and social responsibility.
7. Develop interdisciplinary and collaborative approaches to sustainability.
8. Encourage entrepreneurship and innovation related to sustainable development.
9. Build faculty capacity in Education for Sustainable Development.
10. Establish systematic monitoring and continuous improvement of SDG related initiatives.

4. Policy Statement

Yashoda Technical Campus, Satara is committed to integrating the principles of sustainable development into its academic, research, administrative, operational and community activities.

The Institute shall encourage all stakeholders to contribute towards sustainable development according to their roles and responsibilities. SDG integration shall be achieved primarily through existing institutional mechanisms rather than through creation of isolated activities.

The Institute shall promote sustainability through:

- Curriculum integration
- Experiential learning
- Participative learning
- Active learning
- Collaborative learning
- Student projects
- Research and innovation
- Entrepreneurship
- Sustainable campus practices
- Community engagement
- Faculty development
- Institutional monitoring and review

The policy shall support continuous improvement in institutional sustainability performance.

5. Objectives of SDG Integration

The Institute's SDG framework aims to achieve the following objectives:

5.1 Integration of Sustainability into Education

To incorporate relevant SDG themes and sustainability challenges into curriculum delivery, classroom activities, laboratory work, assignments, seminars, projects and other academic activities wherever appropriate.

5.2 Promotion of Experiential Learning



To provide students with opportunities to understand and address real world environmental, technological and societal problems through industrial visits, field visits, internships, hands on training, in plant training and projects.

5.3 Promotion of Student Driven Solutions

To encourage students to identify sustainability related problems and undertake literature review, problem analysis, design, experimentation, simulation, prototype development and evaluation.

5.4 Promotion of Research and Innovation

To encourage faculty and students to undertake research, innovation and technology development addressing emerging environmental, technological and societal challenges.

5.5 Development of Interdisciplinary Competencies

To encourage collaborative activities involving students and faculty from different disciplines to address complex sustainability challenges.

5.6 Responsible Resource Utilisation

To promote institutional initiatives related to energy conservation, water conservation, waste management, e waste management, plastic reduction, paper reduction, renewable energy, recycling and other sustainable campus practices.

5.7 Community Engagement

To apply institutional knowledge and technical competencies to socially and environmentally relevant problems through outreach and community engagement activities.

5.8 Sustainability Oriented Entrepreneurship

To encourage students to convert innovative sustainability solutions into prototypes, business ideas, startups, products and socially useful technologies wherever feasible.

5.9 Faculty Capacity Building

To develop faculty competencies through FDPs, workshops, seminars, training programmes and collaborative activities related to sustainability and SDGs.

5.10 Monitoring and Continuous Improvement

To systematically document, assess, review and improve SDG implementation through institutional quality assurance mechanisms.



6. Scope of the Policy

This policy shall apply to all academic and institutional activities of Yashoda Technical Campus, Satara, including:

1. Teaching and learning.
2. Laboratory activities.
3. Student projects.
4. Internships and industrial training.
5. Research and development.
6. Innovation and entrepreneurship.
7. Consultancy and technology transfer.
8. Faculty development.
9. Campus infrastructure and operations.
10. Energy and water management.
11. Waste and e waste management.
12. Green campus initiatives.
13. Community engagement.
14. Extension and outreach activities.
15. Student clubs and professional societies.
16. Institutional events and programmes.
17. Administrative practices.
18. Collaboration with industries, institutions, NGOs and community organisations.

7. Guiding Principles

Implementation of this policy shall be guided by the following principles:

7.1 Integration

Sustainability shall be integrated into existing academic and institutional processes rather than being treated only as independent activities.

7.2 Inclusiveness

SDG initiatives shall provide opportunities for participation of students, faculty, staff and community stakeholders.

7.3 Experiential Learning

Students shall be encouraged to learn sustainability concepts through practical experiences and real world problem solving.

7.4 Innovation

Technology, research and innovation shall be encouraged to address sustainability challenges.



7.5 Interdisciplinary Approach

Complex sustainability challenges shall be addressed through multidisciplinary and interdisciplinary approaches.

7.6 Resource Efficiency

Institutional resources shall be utilised responsibly with emphasis on reduction, reuse, recycling and conservation.

7.7 Community Orientation

Academic knowledge and institutional capabilities shall be extended towards socially relevant and community oriented problems.

7.8 Continuous Improvement

SDG implementation shall be periodically reviewed and improved through quality assurance mechanisms.

8. Institutional Mechanism for SDG Implementation

Based on the established academic and institutional processes of Yashoda Technical Campus, SDG implementation shall be organised through the following interconnected dimensions.

Sr. No.	Strategic Dimension	Mechanism for SDG Integration and Implementation	Indicative SDG Linkages
1	Experiential Learning	Industrial visits, field visits, hands on training, in plant training, internships, major projects and minor projects	SDG 4, 6, 7, 8, 9, 11, 12, 13
2	Participative Learning	Seminars, poster presentations, laboratory activities, online certification courses, value added courses, expert lectures, guest lectures and case studies	SDG 4, 7, 9, 11, 12, 13
3	Active Learning	Think Pair Share, interactive questioning, concept mapping, quizzes, One Minute Papers, brainstorming and problem solving activities	SDG 4, 6, 7, 9, 12, 13
4	Collaborative Learning	Group discussions, team based learning, collaborative projects, group assignments, peer learning and pair programming wherever applicable	SDG 4, 8, 9, 11, 12, 13, 17
5	SDG Oriented Student Projects and Innovation	Mini projects, major projects, prototypes, software solutions, simulations and experimental studies addressing sustainability challenges	SDG 4, 6, 7, 9, 11, 12, 13



6	Research, Innovation and Entrepreneurship	Research publications, patents, consultancy, technology development, innovation and entrepreneurship addressing sustainability challenges	SDG 7, 8, 9, 11, 12, 13
7	Sustainable Campus Practices	Renewable energy, energy conservation, water conservation, waste management, e waste management, plastic reduction, paper reduction, reuse, recycling and biodiversity conservation	SDG 6, 7, 11, 12, 13, 15
8	Community Engagement and Outreach	Environmental awareness, community outreach, rural engagement, cleanliness, conservation activities, technology demonstrations and socially relevant initiatives	SDG 3, 4, 6, 7, 11, 12, 13, 15, 17
9	Faculty Capacity Building	FDPs, workshops, seminars, training programmes and collaborative learning related to SDGs, sustainability and green technologies	SDG 4, 9, 13, 17

9. Academic Integration of SDGs

9.1 Course Planning

Faculty members shall identify relevant sustainability themes while preparing course plans wherever they have academic relevance.

Course plans may include:

- Sustainability related examples.
- Real world case studies.
- Environmental applications.
- Sustainable technologies.
- Energy efficient systems.
- Resource conservation problems.
- Socially relevant engineering problems.

9.2 Classroom Teaching

Faculty members may integrate sustainability through:

- Case studies.
- Problem based learning.
- Application oriented examples.
- Group discussions.
- Interactive questioning.
- Problem solving.
- Current technological developments.
- Sustainability related assignments.



9.3 Laboratory Activities

Laboratory activities may be designed or selected to demonstrate:

- Energy efficiency.
- Renewable energy.
- Waste reduction.
- Water conservation.
- Pollution control.
- Resource optimisation.
- Sustainable technologies.

9.4 Assessment

Where appropriate, sustainability related questions may be incorporated into internal and university or institute level assessments.

Students may be evaluated through:

- Case studies.
- Assignments.
- Mini projects.
- Presentations.
- Laboratory work.
- Design activities.
- Problem solving exercises.

10. SDG Integration in Academic Activities

Purpose of SDG Integration in Academic Activities

The purpose of integrating the **Sustainable Development Goals (SDGs) into academic activities** is to connect teaching, learning, research and student development with global and local sustainability challenges. It enables students to apply disciplinary knowledge to real-world economic, social and environmental issues while developing the competencies required for responsible professional practice.

Key Purposes

1. **To promote quality education**
Integrate SDG concepts into curriculum, teaching-learning practices and assessment to develop critical thinking, problem-solving and application-oriented learning.
2. **To connect academic learning with real-world challenges**
Encourage students to apply engineering and technical knowledge to issues related to energy, water, environment, health, sustainable infrastructure, poverty and social development.



3. **To develop sustainability competencies**
Develop students' ability to understand environmental, social and economic dimensions of development and make responsible decisions.
4. **To promote innovation and research**
Encourage projects, research and innovation activities that develop practical and technology-based solutions to sustainability challenges.
5. **To encourage experiential and application-based learning**
Use projects, laboratory work, field studies, case studies, internships and community-based activities to provide students with practical exposure to SDG related issues.
6. **To develop socially responsible professionals**
Enable students to understand the social and ethical implications of professional decisions and contribute responsibly to society.
7. **To strengthen interdisciplinary learning**
Encourage students from different disciplines to work together on complex sustainability problems that cannot be addressed through a single discipline.
8. **To promote industry and community engagement**
Connect academic activities with industries, government organisations, NGOs and local communities for addressing practical sustainability challenges.
9. **To encourage responsible use of resources**
Promote awareness and practices related to energy conservation, water management, waste reduction, sustainable production and efficient utilisation of resources.
10. **To support institutional sustainability goals**
Align academic activities with the institution's sustainability initiatives and provide measurable evidence of the institution's contribution towards relevant SDGs.

SDG	Sustainable Development Goal	Academic Activity for Integration	How SDG Can Be Integrated
SDG 1	No Poverty	Community Projects, Extension Activities, Entrepreneurship Projects	Students identify local livelihood problems and develop affordable technology or entrepreneurship based solutions.
SDG 2	Zero Hunger	Agriculture Technology Projects, IoT Projects, Food Technology Activities	Integrate smart irrigation, precision agriculture, food preservation, crop monitoring and resource efficient farming projects.
SDG 3	Good Health and Well-being	Healthcare Projects, Biomedical Applications, Student Projects	Encourage development of health monitoring systems, assistive devices, fitness applications and healthcare technologies.
SDG 4	Quality Education	Active Learning, Experiential Learning, Collaborative Learning, ICT Based Learning	Use flipped classroom, PBL, peer learning, simulations, experiential activities and digital learning resources.
SDG 5	Gender Equality	Inclusive Projects, Team Activities, Technical Competitions	Ensure equal participation in academic teams and encourage projects addressing women's



			safety, health, education and economic participation.
SDG 6	Clean Water and Sanitation	Environmental Engineering Projects, Water Quality Experiments	Include water quality analysis, water conservation, rainwater harvesting, wastewater treatment and smart water monitoring projects.
SDG 7	Affordable and Clean Energy	Renewable Energy Courses, Energy Audits, Laboratory Experiments	Integrate solar PV, wind energy, energy storage, electric vehicles, energy efficiency and energy management into courses and projects.
SDG 8	Decent Work and Economic Growth	Internship, Industrial Visit, Industry Projects, Entrepreneurship	Connect curriculum with industry requirements through internships, industrial problems, skill development and entrepreneurship activities.
SDG 9	Industry, Innovation and Infrastructure	Design Projects, Hackathons, Research Projects, Prototyping	Promote innovation through prototype development, technology challenges, interdisciplinary projects, research and industry sponsored projects.
SDG 10	Reduced Inequalities	Inclusive Design Projects, Assistive Technology Projects	Develop affordable and accessible engineering solutions for persons with disabilities and underserved communities.
SDG 11	Sustainable Cities and Communities	Smart City Projects, Sustainable Campus Projects, Urban Mobility Studies	Integrate smart transportation, waste management, renewable energy, sustainable buildings and urban infrastructure studies.
SDG 12	Responsible Consumption and Production	Green Engineering, Waste Management Projects, Product Design	Include life cycle analysis, material efficiency, recycling, e-waste management, sustainable product design and resource conservation.
SDG 13	Climate Action	Climate Projects, Carbon Footprint Analysis, Energy Conservation	Integrate climate change, carbon accounting, renewable energy, energy efficiency and climate resilient engineering into academic activities.
SDG 14	Life Below Water	Environmental Projects, Water Pollution Studies	Include water pollution monitoring, aquatic ecosystem studies, plastic pollution and technologies for protection of water resources.
SDG 15	Life on Land	Biodiversity Projects, Environmental Audits, GIS Projects	Integrate biodiversity assessment, land use studies, afforestation, soil conservation and GIS based environmental analysis.



SDG 16	Peace, Justice and Strong Institutions	Ethics, Professional Practice, Debate, Case Studies	Integrate professional ethics, engineering responsibility, governance, transparency, cyber ethics and ethical decision-making.
SDG 17	Partnerships for the Goals	Industry Academia Collaboration, Joint Research, Community Projects	Promote academic partnerships with industries, government organisations, NGOs and other educational institutions through joint activities.

11.SDG Mapping of Innovative Teaching and Learning Activities

Active Learning, Experiential Learning, Collaborative Learning and Participative Learning

11.1. Active Learning

Definition

Active Learning is a student-centred teaching approach in which students actively engage in **thinking, analysing, questioning, discussing, solving problems, applying concepts or making decisions** during the learning process rather than passively listening to a lecture.

The teacher acts as a facilitator who designs activities that require students to process and apply knowledge.

How to conduct Active Learning Activities

Step 1: Identify the learning outcome

The faculty member identifies what students should understand or be able to do after the activity.

Step 2: Select an appropriate activity

Select an activity such as given in table example

Step 3: Provide the problem or learning stimulus

Give students a question, case, situation, diagram, numerical problem, faulty system or short technical scenario.

Step 4: Give students time to think and work

Students individually or in small groups analyse the given problem.

Step 5: Facilitate discussion

The teacher moves around the classroom, asks guiding questions and supports students without immediately providing the solution.

Step 6: Students present their response

Selected students or groups explain their approach and answer questions.



Step 7: Teacher provides feedback and consolidation

The faculty member discusses the correct approach, clarifies misconceptions and connects the activity with the course concept.

Step 8: Assess the learning

Assessment can be through a short quiz, worksheet, problem solution, rubric, presentation or exit ticket.

Table of Example & SDG Mapping

Sr. No.	Innovative Teaching Activity	Relevant SDG	Justification
1	Think-Pair-Share	SDG 4	Promotes active participation, communication and deeper understanding of concepts.
2	Flipped Classroom	SDG 4	Promotes self-directed learning and effective use of classroom time for application and problem solving.
3	Problem of the Day	SDG 4	Develops regular problem-solving ability, analytical thinking and application of engineering knowledge.
4	Concept Mapping	SDG 4	Helps students organise knowledge and understand relationships among concepts.
5	Peer Instruction	SDG 4	Encourages students to learn from one another and develop communication skills.
6	Case Based Learning	SDG 4, SDG 9	Connects theoretical knowledge with real engineering situations and promotes innovative problem solving.
7	Problem Based Learning	SDG 4, SDG 9	Develops engineering problem-solving capability and encourages innovative solutions.
8	Error Identification Activity	SDG 4, SDG 9	Develops analytical thinking, troubleshooting ability and engineering judgement.
9	Predict-Observe-Explain	SDG 4, SDG 9	Develops scientific reasoning by connecting theoretical predictions with practical observations.
10	Concept Quiz	SDG 4	Provides immediate feedback and encourages continuous learning.



11.2. Experiential Learning

Definition

Experiential Learning is a learning approach in which students acquire knowledge and skills through **direct experience, practical activity, observation, reflection and application.**

It connects classroom theory with real or simulated situations.

A useful sequence is:

Experience → Observe → Reflect → Understand → Apply

How to conduct Experiential Learning Activities

Step 1: Identify the concept requiring practical application

Select a concept that can be demonstrated through an experiment, project, field activity, simulation or real-world problem.

Step 2: Define the practical learning outcome

For example:

"Students will be able to measure and analyse the performance of a particular system."

Step 3: Provide the task

Give students an experiment, field problem, industrial problem, simulation or project.

Step 4: Students perform the activity

Students operate equipment, collect data, develop a prototype, conduct measurements or perform simulations.

Step 5: Students analyse the experience

Students compare observations with theoretical expectations.

Step 6: Reflection

Ask students:

- What did you observe?
- Why did this happen?
- What was different from the theoretical result?
- What problems did you encounter?
- How can the system be improved?



Step 7: Application

Students apply their learning to another problem or situation.

Step 8: Assessment

Assess the students through practical performance, report, observation, viva, project output or rubric.

Table of Example & SDG Mapping

Sr. No.	Innovative Teaching Activity	Relevant SDG	Justification
1	Laboratory Based Learning	SDG 4, SDG 9	Develops practical engineering competencies through hands-on experimentation.
2	Mini Project	SDG 4, SDG 9	Enables students to apply knowledge to develop practical engineering solutions.
3	Prototype Development	SDG 9	Promotes innovation, product development and conversion of ideas into working solutions.
4	Simulation Based Learning	SDG 4, SDG 9	Develops technical skills through modelling, simulation and analysis of engineering systems.
5	Industrial Visit	SDG 4, SDG 8	Provides exposure to industrial practices, technologies and workplace requirements.
6	Field Based Learning	SDG 4, SDG 11	Enables students to understand and address real-world community and infrastructure issues.
7	Design Challenge	SDG 9	Encourages innovation, engineering design and development of practical solutions.
8	Troubleshooting Exercise	SDG 4, SDG 9	Develops practical diagnostic and maintenance capabilities required in engineering practice.
9	Internship Based Learning	SDG 4, SDG 8	Integrates academic learning with professional experience and employability skills.
10	Community Based Project	SDG 4, SDG 11	Applies engineering knowledge to address local community needs and improve quality of life.
11	Living Laboratory	SDG 4, SDG 7, SDG 11	Uses the campus as a real learning environment for energy efficiency, renewable energy and sustainable infrastructure.
12	Research Based Learning	SDG 4, SDG 9	Develops research capability and encourages creation of new knowledge and technological solutions.
13	Industry Problem Solving	SDG 8, SDG 9	Connects students with industry requirements and promotes innovation and employability.



11.3. Collaborative Learning

Definition

Collaborative Learning is a learning approach in which students work together in **small groups to achieve a common learning objective**, sharing knowledge, responsibilities, ideas and problem-solving strategies.

The emphasis is on **learning with and from peers**.

How to conduct Collaborative Learning Activities

Step 1: Define a common learning objective

The objective should require students to work together rather than simply divide the work.

Step 2: Form diverse groups

Normally, groups of 4 to 6 students can be formed. Where appropriate, students can be selected from different competency levels or disciplines.

Step 3: Assign a common problem

The problem should require discussion, analysis and joint decision making.

Step 4: Allocate responsibilities

For example:

- Team Leader
- Technical Analyst
- Data Analyst
- Documentation Coordinator
- Presenter

Roles may be rotated in subsequent activities.

Step 5: Students collaborate

Students discuss the problem, exchange knowledge, analyse alternatives and develop a common solution.

Step 6: Faculty facilitates

The teacher monitors group interaction, asks questions and ensures that all students participate.

Step 7: Group presentation



Each group presents its solution to the class.

Step 8: Peer evaluation

Other groups provide questions or feedback.

Step 9: Faculty evaluation

The teacher evaluates both the **group output and individual contribution**.

Table of Example & SDG Mapping

Sr. No.	Innovative Teaching Activity	Relevant SDG	Justification
1	Team Based Problem Solving	SDG 4	Develops teamwork, communication and collective problem-solving skills.
2	Jigsaw Learning	SDG 4	Promotes peer learning, knowledge sharing and collaborative learning.
3	Peer Teaching	SDG 4	Develops knowledge sharing, communication and leadership capabilities.
4	Collaborative Design	SDG 9	Encourages students to jointly develop innovative engineering solutions.
5	Group Case Analysis	SDG 4, SDG 9	Develops collaborative analysis and application of engineering knowledge.
6	Team Based Learning	SDG 4	Develops teamwork, accountability and application-oriented learning.
7	Hackathon	SDG 9	Promotes innovation, technology development and rapid problem solving.
8	Design Sprint	SDG 9	Supports rapid ideation, prototyping, testing and refinement of innovative solutions.
9	Collaborative Coding	SDG 4, SDG 9	Develops software development, peer review and collaborative technical skills.
10	Interdisciplinary Project	SDG 4, SDG 9	Integrates knowledge from multiple disciplines to address complex engineering problems.
11	Peer Review	SDG 4	Develops critical evaluation, constructive feedback and academic learning skills.
12	Group Research Project	SDG 4, SDG 9	Promotes collaborative research and development of technology-oriented solutions.
13	Industry Academia Team Challenge	SDG 8, SDG 9	Connects academic learning with industrial requirements and innovation.



11.4. Participative Learning

Definition

Participative Learning is a student-centred learning approach in which students actively participate in the educational process by **expressing ideas, asking questions, discussing issues, presenting viewpoints, debating alternatives and contributing to decisions.**

The main emphasis is on **student voice and involvement.**

How to conduct Participative Learning Activities

Step 1: Select a discussion-oriented topic

Choose a topic that has multiple viewpoints, possible solutions or scope for discussion.

Step 2: Provide background material

Give students reading material, data, case studies or technical information before the activity.

Step 3: Explain participation rules

Students should listen to others, provide evidence for their views and maintain respectful academic discussion.

Step 4: Conduct the activity

Possible formats include:

- Group Discussion
- Debate
- Panel Discussion
- Role Play
- Brainstorming
- Student Seminar
- Student Led Classroom

Step 5: Encourage broad participation

The faculty member should ensure that participation is not restricted to only a few confident students.

Step 6: Question and counter-question

Students ask questions, challenge assumptions and respond to alternative viewpoints.

Step 7: Faculty summarises

The teacher consolidates the major arguments and links them with the academic concepts.



Step 8: Assessment

Assessment may consider:

- Technical content
- Quality of arguments
- Communication
- Participation
- Use of evidence
- Critical thinking

Table of Example & SDG Mapping

Sr. No.	Innovative Teaching Activity	Relevant SDG	Justification
1	Group Discussion	SDG 4	Develops communication, critical thinking and participation in learning.
2	Debate	SDG 4, SDG 16	Develops evidence-based argumentation, respectful dialogue and informed discussion.
3	Role Play	SDG 4, SDG 8	Develops professional communication, decision-making and workplace-related skills.
4	Technical Quiz	SDG 4	Encourages continuous learning, knowledge retention and student engagement.
5	Student Seminar	SDG 4	Develops technical communication, self-learning and presentation skills.
6	Poster Presentation	SDG 4, SDG 9	Promotes communication of technical knowledge, research and innovation.
7	Panel Discussion	SDG 4, SDG 16	Promotes informed discussion, communication and consideration of diverse viewpoints.
8	Brainstorming	SDG 9	Encourages generation of multiple ideas and innovative engineering solutions.
9	Student Led Classroom	SDG 4	Develops leadership, responsibility, communication and self-directed learning.
10	Question Formulation Activity	SDG 4	Develops curiosity, critical thinking and higher-order questioning skills.
11	Learning Stations	SDG 4	Provides students with multiple learning experiences and encourages active participation.
12	Gamification	SDG 4	Increases engagement, motivation and participation in the learning process.



12. SDG Oriented Student Projects and Innovation

The Institute shall encourage identification of sustainability related problems through:

- Academic activities.
- Literature surveys.
- Industry interaction.
- Community needs.
- Faculty research.
- Emerging technologies.
- Local environmental challenges.

Such problems may be developed into:

- Mini projects.
- Major projects.
- Prototypes.
- Software solutions.
- Simulation models.
- Experimental studies.
- Product designs.
- Innovation projects.

Projects shall be reviewed and evaluated based on technical quality, problem relevance, innovation, feasibility and measurable outcomes.

13. Research, Innovation and Entrepreneurship

Research and innovation shall constitute an important component of the Institute's SDG framework.

Faculty members and students shall be encouraged to undertake work in areas such as:

- Renewable energy.
- Energy efficiency.
- Electric mobility.
- Sustainable transportation.
- Waste management.
- Water management.
- Green technologies.
- Artificial intelligence for sustainability.
- Sustainable manufacturing.
- Environmental monitoring.
- Sustainable agriculture.
- Climate related technologies.
- Social innovation.



Where feasible, research outcomes may be converted into:

- Patents.
- Publications.
- Prototypes.
- Technology solutions.
- Consultancy projects.
- Startups.
- Entrepreneurship opportunities.

14. Sustainable Campus Practices

The Institute shall promote sustainability through responsible campus management.

Major areas shall include:

14.1 Energy Conservation

- Renewable energy utilisation.
- Energy efficient lighting.
- Energy efficient equipment.
- Energy monitoring.
- Awareness programmes.

14.2 Water Conservation

- Rainwater harvesting.
- Water efficient fixtures.
- Water conservation awareness.
- Leakage control.
- Reuse of water wherever feasible.

14.3 Waste Management

- Source segregation.
- Solid waste management.
- Recycling.
- Composting wherever feasible.
- Responsible disposal.

14.4 E Waste Management

- Collection of e waste.
- Segregation.
- Safe storage.
- Handover to authorised recyclers.



14.5 Plastic Reduction

- Reduction of single use plastic.
- Promotion of reusable alternatives.
- Plastic awareness campaigns.
- Plastic free campus initiatives.

14.6 Paper Conservation

- Digital communication.
- Paperless documentation wherever feasible.
- Double sided printing.
- Reuse of paper for internal purposes.

14.7 Biodiversity

- Plantation.
- Green spaces.
- Native plant species.
- Biodiversity awareness.
- Protection of campus vegetation.

15. Community Engagement and Outreach

The Institute shall extend sustainability related knowledge and technical capabilities to surrounding communities.

Activities may include:

- Environmental awareness programmes.
- Rural development activities.
- Cleanliness campaigns.
- Water conservation awareness.
- Energy conservation awareness.
- Waste management awareness.
- Technology demonstrations.
- Skill development.
- Community problem identification.
- Social innovation initiatives.

Students shall be encouraged to apply their technical knowledge to address practical community problems.



16. Faculty Capacity Building

Faculty members shall be encouraged to enhance their understanding of sustainability and SDGs through:

- Faculty Development Programmes.
- Workshops.
- Seminars.
- Conferences.
- Online courses.
- Certification programmes.
- Training programmes.
- Industry interaction.
- Research collaborations.
- Interdisciplinary projects.

Departments shall encourage faculty members to incorporate relevant sustainability perspectives into teaching, research and project supervision.

17. Institutional Roles and Responsibilities

17.1 Governing Body

The Governing Body shall provide strategic direction and institutional support for implementation of the policy.

17.2 Director

The Director shall ensure institutional implementation and facilitate necessary resources and coordination.

17.3 IQAC

IQAC shall:

1. Coordinate SDG integration.
2. Maintain institutional documentation.
3. Monitor implementation.
4. Facilitate quality improvement initiatives.
5. Compile annual SDG related achievements.
6. Coordinate sustainability related audits and reviews.

17.4 Heads of Departments

Heads of Departments shall:



- Facilitate academic integration.
- Monitor SDG related activities.
- Encourage projects and research.
- Maintain departmental records.

17.5 Faculty Members

Faculty members shall:

- Integrate relevant sustainability themes into teaching.
- Encourage student participation.
- Promote sustainability oriented projects.
- Document activities and outcomes.

17.6 Students

Students shall:

- Participate in SDG activities.
- Develop sustainability oriented projects.
- Practise responsible resource utilisation.
- Participate in community engagement.

17.7 Administrative and Support Staff

Staff members shall support sustainable campus operations, resource conservation, waste management and compliance with institutional sustainability practices.

18. Monitoring and Evaluation

The Institute shall adopt a systematic mechanism for monitoring SDG implementation.

Monitoring shall consider:

- Number of SDG integrated courses or course activities.
- Number of sustainability related student projects.
- Number of research publications.
- Number of patents and innovations.
- Number of sustainability related FDPs and workshops.
- Number of community engagement activities.
- Energy conservation initiatives.
- Water conservation initiatives.
- Waste reduction and recycling.
- Plastic reduction.
- E waste management.
- Renewable energy utilisation.
- Student participation.



- Measurable environmental and social outcomes.

The data shall be compiled periodically and reviewed through appropriate institutional committees.

19. Documentation and Evidence

Departments and institutional units shall maintain appropriate evidence of SDG related activities.

Indicative evidence includes:

1. Activity reports.
2. Photographs.
3. Attendance records.
4. Course plans.
5. Lesson plans.
6. Question papers.
7. Project reports.
8. Internship reports.
9. Research publications.
10. Patent documents.
11. Certificates.
12. Event notices.
13. Feedback forms.
14. Audit reports.
15. Energy and water consumption records.
16. Waste management records.
17. Community engagement reports.
18. Annual SDG performance reports.

Documentation shall be maintained in physical or digital form as applicable.

20. Review and Continuous Improvement

The implementation of the SDG Policy shall be reviewed periodically by the IQAC and concerned institutional authorities.

The review shall identify:

- Achievements.
- Gaps.
- Challenges.
- Resource requirements.
- Good practices.
- Areas requiring improvement.
- Opportunities for new SDG initiatives.



Based on the review, corrective and preventive actions shall be identified and incorporated into subsequent academic and institutional planning.

21. SDG Performance Reporting

The Institute may prepare an annual **SDG and Sustainability Report** covering major initiatives undertaken during the academic year.

The report may include:

- SDG wise activities.
- Academic integration.
- Student projects.
- Research and innovation.
- Campus sustainability.
- Community engagement.
- Faculty development.
- Quantitative indicators.
- Outcomes and impact.
- Best practices.
- Future action plan.

The report shall support institutional quality assurance, accreditation and sustainability reporting requirements.

22. SDG Mapping

The Institute shall map its academic and institutional initiatives with relevant SDGs.

The major SDGs addressed through institutional activities include:

SDG	Focus Area	Indicative Institutional Contribution
SDG 3	Good Health and Well Being	Health awareness, sanitation, community initiatives
SDG 4	Quality Education	OBE, experiential learning, projects, skill development
SDG 5	Gender Equality	Inclusive educational opportunities and participation
SDG 6	Clean Water and Sanitation	Water conservation and awareness
SDG 7	Affordable and Clean Energy	Renewable energy and energy conservation
SDG 8	Decent Work and Economic Growth	Skill development, internships and entrepreneurship
SDG 9	Industry, Innovation and Infrastructure	Research, innovation, technology and industry interaction



SDG 10	Reduced Inequalities	Inclusive education and community initiatives
SDG 11	Sustainable Cities and Communities	Sustainable campus and community engagement
SDG 12	Responsible Consumption and Production	Waste reduction, recycling and resource efficiency
SDG 13	Climate Action	Green campus and climate awareness
SDG 14	Life Below Water	Plastic reduction and environmental awareness
SDG 15	Life on Land	Plantation, biodiversity and conservation
SDG 16	Peace, Justice and Strong Institutions	Ethical governance and institutional practices
SDG 17	Partnerships for the Goals	Industry, academic and community partnerships

23. Alignment with Quality and Accreditation Frameworks

The SDG Integration Policy supports the Institute's quality assurance and accreditation related initiatives through:

- Outcome Based Education.
- Experiential and participative learning.
- Research and innovation.
- Extension and community engagement.
- Green campus practices.
- Environmental sustainability.
- Continuous improvement.
- Institutional documentation.
- Stakeholder participation.

The policy may be used as supporting evidence for relevant requirements of **NAAC, NBA, AICTE, UGC and other applicable accreditation and regulatory frameworks**, subject to the specific requirements of the respective framework.

24. Expected Outcomes

Implementation of the policy is expected to result in:

1. Increased integration of sustainability into teaching and learning.
2. Improved student awareness of global sustainability challenges.
3. Increased number of sustainability oriented projects.
4. Strengthened research and innovation in sustainability domains.
5. Improved resource utilisation.
6. Reduction in avoidable waste generation.
7. Improved energy and water conservation practices.
8. Increased community engagement.
9. Development of interdisciplinary competencies.
10. Increased faculty capacity in Education for Sustainable Development.



11. Development of environmentally responsible institutional culture.
12. Strengthening of Green Campus initiatives.

25. SDG Integration Cycle

The Institute shall follow a continuous cycle for SDG integration:

Planning → Implementation → Assessment → Documentation → Review → Corrective Action → Improvement

Planning

Identify relevant SDG themes and sustainability challenges.

Implementation

Integrate identified themes into academic and institutional activities.

Assessment

Evaluate participation, learning outcomes and measurable results.

Documentation

Maintain appropriate records and evidence.

Review

Analyse achievements and identify gaps.

Corrective Action

Implement necessary improvements.

Continuous Improvement

Incorporate learning from previous implementation into future planning.

26. Stakeholder Participation



Successful SDG implementation requires participation of all stakeholders.

The Institute shall encourage participation of:

- Students.
- Faculty members.
- Administrative staff.
- Technical and support staff.
- Alumni.
- Parents.
- Industry partners.
- NGOs.
- Community organisations.
- Government agencies.
- Professional bodies.
- Academic institutions.

Collaborative initiatives shall be encouraged wherever they contribute to institutional sustainability objectives.

27. Policy Implementation and Authority

This policy shall be implemented under the overall guidance of the Competent Authority of Yashoda Technical Campus.

The IQAC shall function as a coordinating mechanism for monitoring and quality improvement, while individual departments and institutional units shall remain responsible for implementation within their respective areas.

The policy shall not replace existing academic, administrative, environmental or statutory procedures. Instead, it shall provide an overarching framework for integrating sustainability into those existing processes.

28. Policy Review

This policy shall be reviewed once every two years or earlier if required due to:

- Changes in Government regulations.
- Changes in accreditation requirements.
- Changes in institutional strategic priorities.
- Emerging sustainability challenges.
- Recommendations from internal reviews.
- Recommendations from stakeholders.

Any revision shall be approved by the Competent Authority.



Approval

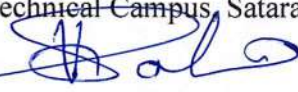
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